

METHODS FOR FINISHING MICROELECTRONIC DEVICE PACKAGES

ABSTRACT

Methods for finishing or refurbishing surfaces on protective covers encapsulating microelectronic dies. In one embodiment, a method for finishing a surface of a protective package on a microelectronic device includes abrading the surface of the package by engaging an abrasive media with the surface of the package, terminating the abrasion when a surface blemish has been at least partially removed from the package, and cleaning residual materials from the package after terminating the abrasion of the package surface. The abrasive media can include a fixed-abrasive member, a fixed-abrasive member and a solution, a non-abrasive member and a chemical solution having abrasive particles, or an abrasive blasting media. Methods for finishing a surface of a protective package on a microelectronic device in accordance with other embodiments of the invention include ablating the surface of the package to remove a layer of material from the package, etching the surface of the package to remove a layer of material from the package, and pressing a heated surface of stamp or press having a preselected finish against the package surface to emboss the package surface. Ablating the surface of the package to remove a layer of material from the packages, for example, can include ablating the surface of the package with a laser light.